BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Diploma in Horticulture Pearson BTEC International Level 3 Extended Diploma in Horticulture
Unit number and title	Unit 44: Linear and Level Surveying
Learning aim(s)	**A** Investigate methods used in linear and level surveying of sites **B** Undertake linear and level surveying of sites to produce accurate data and representations **C** Carry out setting out on the ground from plans
Assignment title	**Linear surveying investigation and portfolio of practical work**
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You are working for a landscape design business that has employed you as a site surveyor. You have been asked to carry out a range of assessments, and to draw up plans, following a linear and level surveying of the site. You have been asked to survey and report back with your interpretation and data analysis.
Task 1	Produce a report analysing the range of linear and level surveying techniques, methods and approaches used to carry out linear and level surveying. In your report you should include: • methods, equipment and recording • linear surveying processes • offsets, triangulations, single and multiple baseline use and location of survey points and, for level surveys, datum types and data processes to produce reduced levels • techniques to record curvilinear lines and trees • potential issues and constraints.
Checklist of evidence required	Written report

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
A.D1	Evaluate methods and approaches used in linear and level surveying of sites.
A.M1	Assess methods and approaches used in linear and level surveying of sites.
A.P1	Explain methods and approaches used in linear surveying of sites.
A.P2	Explain methods and approaches used in level surveying of sites.
Task 2	You must now carry out a range of practical activities. Produce a portfolio of practical evidence by carrying out practical activities for a linear survey using offsets and triangulation. The practical surveying must cover: • key perimeters • structures and key vegetation • key measurement data • sketch overview • aspect • total distance baseline measurement • label descriptions for most reference points. You should also ensure you include evidence of: • producing a setting-out plan • carrying out setting-out activities safely, both in shape and level • carrying out linear and level surveys safely • producing documentation to record the survey outcomes You will then interpret a given design plan identifying all key design elements and all information sources, including: • heights • centre points • required setting-out methods. Following your interpretation produce a comprehensive setting-out plan or overlay that correctly identifies all measurements.
Checklist of evidence required	Portfolio of practical activities in a practical-activities logbook, photographic evidence and data interpretation.

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
B.D2	Carry out comprehensive linear and level surveys of given sites, producing survey documentation with a high degree of accuracy.
C.D3	Demonstrate accurate and efficient setting out of a site, following own comprehensive setting-out plan.
B.M2	Carry out a complex linear survey of a given site, producing detailed

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
	survey documentation.
B.M3	Carry out a complex level survey of a given site, producing detailed survey documentation.
C.M4	Demonstrate complex setting out for a site.
C.M5	Produce a detailed setting-out plan for a given site.
B.P3	Carry out a basic linear survey of a given site, producing outline survey documentation.
B.P4	Carry out a basic level survey of a given site, producing outline survey documentation.
C.P5	Demonstrate basic setting out for a site.
C.P6	Produce a simple setting-out plan for a given site.
Sources of information to support you with this Assignment	**Books** Bannister, A. (1998). *Surveying*. New York: Prentice Hall. ISBN-13: 978-0582302495 Chudley, R. Greeno, R. (2016). *Building Construction Handbook*. 11th ed. London: Routledge. ISBN-13: 978-1138907096 Nathanson, J. et al. (2017). *Surveying Fundamentals and Practices (What's New in Trades & Technology)*. 7th ed. London: Pearson. ISBN-13: 978-0134414430 **Journals/Magazines** *Journal of Surveying Engineering* *Professional Surveyor* **Websites** designingbuildings.co.uk citb.co.uk